

#### CLAIMS:

1. A golf ball comprising a core and a cover wherein said cover on its surface incorporates a coating comprising a thermochromic material, wherein the thermochromic material is capable of indicating whether the golf ball is above or below a predetermined temperature.
2. The golf ball of claim 1 wherein the thermochromic material comprises a leuco dye system.
3. The golf ball of claim 1 wherein the thermochromic material is incorporated into a primer coat.
4. The golf ball of claim 1 wherein the thermochromic material is incorporated into a topcoat.
5. The golf ball of claim 1, wherein the cover comprises at least one inner cover layer and at least one outer cover layer.
6. The golf ball of claim 1, further comprising a temperature indicating mark printed on the cover.
7. The golf ball of claim 1, wherein the core comprises at least an inner core and a core layer surrounding the inner core.
8. A golf ball comprising a core and a cover wherein said cover incorporates on its surface at least one coating layer, wherein the at least one coating layer comprises a thermochromic material, and wherein the thermochromic changes to a visible color at a predetermined temperature, thereby allowing the observation of the thermochromic material.
9. The golf ball of claim 8 wherein the thermochromic material is a leuco dye system.
10. The golf ball of claim 8 wherein the thermochromic material is incorporated into a primer coat.
11. The golf ball of claim 8 wherein the thermochromic material is incorporated into a topcoat.
12. The golf ball of claim 8 wherein the cover comprises at least one inner cover layer and at least one outer cover layer.

13. The golf ball of claim 8, further comprising a temperature indicating mark printed on the cover.
14. The golf ball of claim 8, wherein the core comprises at least an inner core and a core layer surrounding the inner core.
15. A golf ball comprising a core and a cover wherein said cover incorporates at least one coating layer comprising a thermochromic material to indicate whether said golf ball is above or below a predetermined temperature, said thermochromic material comprising a leuco dye system.
16. The golf ball of claim 15 wherein said thermochromic material is incorporated into a primer coat.
17. The golf ball of claim 15 wherein said thermochromic material is incorporated into a topcoat.
18. The golf ball of claim 15 wherein the cover comprises at least one inner cover layer and at least one outer cover layer.
19. The golf ball of claim 15, further comprising a temperature indicating mark printed on the cover.
20. The golf ball of claim 15, wherein the core comprises at least an inner core and a core layer surrounding the inner core.